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automatically changing a circuit structure of the at least one programmable logic device corresponding to the change data without removal of the at least one programmable logic device from the encrypting circuit.

24. (FOUR TIMES AMENDED) A decrypting method, comprising:

forming a decrypting circuit corresponding to given decrypting specifications with at least one programmable logic device;

reading change data for changing the decrypting specifications;

automatically generating change data for changing the [encrypting] decrypting specification; and

automatically changing a circuit structure of the at least one programmable logic device corresponding to the change data without removal of the at least one programmable logic device from the decrypting circuit.

REMARKS

In the July 17, 2000 Office Action, the Examiner noted that claims 1-25 were pending in the application, rejected claims 21 and 22 under 35 U.S.C. § 102(b) and rejected claims 1-20 and 23-25 under 35 U.S.C. § 103(a). In rejecting the claims, U.S. Patents 4,972,478 to Dabbish; 5,703,950 to Jovanovich et al.; and 5,345,508 to Lynn et al. (References G, B and E, respectively in the March 23, 1999 Office Action) were cited. Claims 1-25 remain in the case. The Examiner's rejections are traversed below.

Amendments to the Claims

As discussed in the following section, the independent apparatus claims have been amended to distinguish over the prior art. In addition, the claims have been amended to shift which elements perform the operation of generating the change data to more accurately correspond to the disclosed embodiments. Entry of this amendment and reconsideration of the claims is respectfully requested.

Rejection under 35 U.S.C. § 102(b)

In item 6 on page 3 of the Office Action, claims 21 and 22 were rejected under 35 U.S.C. § 102(b) as anticipated by Dabbish '478. All of the independent apparatus claims have been amended to add "an enclosure substantially surrounding" (e.g., claim 21, line 10) the previously recited elements. As stated in the Office Action, Dabbish '478 requires external

components to be reprogrammed. The enclosure element has been added to the independent apparatus claims to clarify that all required components are included in a single device. Therefore, it is submitted that claims 21 and 22 are not anticipated by Dabbish '478.

Rejections under 35 U.S.C. § 103(a)

In item 8 on page 4 of the Office Action, claims 1, 5, 8, 10, 14, 17, 19, 20 and 23-25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Dabbish '478. In addition, claims 21 and 22 will also be discussed with respect to this rejection, since they have been amended to recite apparatuses that clearly are not anticipated by Dabbish '478 and claims 7 and 16 which were rejected in item 10 as unpatentable over Dabbish '478 will also be discussed.

As discussed in the Amendment filed April 10, 2000, the circuit disclosed by Dabbish '478 includes the ability to reprogram the crypto cores 100, 101 by using external programming equipment 105, but reference must be made to U.S. Patent 4,914,697 to Dabbish et al. to determine how this is done. Dabbish et al. '697 states that "an external device such as a microprocessor controlled computer is coupled to the address and data bus ports and is utilized to program the internal gate configurations of each EEPAL" (column 2, lines 64-67) after installation of the EEPAL. There is no suggestion in either Dabbish '478 or Dabbish et al. '697 that a device incorporating the circuits disclosed in these two patents include "a mapping data generating unit to read change data for changing at least one of the encrypting specifications ... and to generate a mapping data object representing the structure of the encrypting circuit" (claim 1, lines 5-8) and "a changing unit ... to change automatically a structure of the encrypting circuit corresponding to the mapping data object by changing a circuit structure of the programmable logic device without removal from said encrypting apparatus" (claim 1, lines 9-12). As discussed in the April 10, 2000 Amendment, the "ability to automatically change circuit structure enables the present invention to provide the benefit of fast and flexible encryptions/decryption." Specifically, the present invention provides the benefit of a system that can apply many different algorithms to blocks of data that vary in length with encryption keys that vary in length and which does not require the user to be knowledgeable in encryption algorithms, nor does it require an external computer that has been programmed with encryption/decryption algorithms.

Claims 10 and 19-22 have been amended to recite limitation similar to those discussed above with respect to claim 1. Therefore, it is submitted that claims 1, 10 and 19-22, together with claims 5, 7, 8, 14, 16 and 17 which depend from claims 1 and 10, patentably distinguish over Dabbish '478.

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In item 9 on pages 4-5 of the Office Action, claims 2-4, 6, 11-13 and 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Dabbish</u> '478 in view of <u>Jovanovich et al.</u> Furthermore, in item 11 on page 6 of the Detailed Action, claims 9 and 18 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Dabbish</u> '478 in view of <u>Lynn et al.</u> Since claims 2-4, 6, 9, 11-13, 15 and 18 depend from claims 1 and 10, it is submitted that these claims patentably distinguish over <u>Dabbish</u> '478 for the reasons discussed above with respect to claims 1 and 10. Furthermore, it is submitted that the addition of <u>Jovanovich et al.</u> or <u>Lynn et al.</u> does not overcome the deficiencies of <u>Dabbish</u> '478 discussed above, because as discussed in the December 27, 1999 Preliminary Amendment and the April 10, 2000 Amendment neither <u>Jovanovich et al.</u> or <u>Lynn et al.</u> teach or suggest modifying <u>Dabbish</u> '478 to obtain an apparatus for automatically changing circuit structure without requiring knowledge of how to program an encryption algorithm in an external computer.

<u>Summary</u>

It is submitted that the references cited by the Examiner, taken individually or in combination, do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-25 are in a condition suitable for allowance. Entry of the Amendment, reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

If any further fees are required in connection with the filing of this Amendment, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,
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